



### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A cable modem tuner, comprising:
  - a tuner portion taking and amplifying a signal corresponding to a reception channel from input signals, and converting to an intermediate frequency signal;
  - a surface acoustic wave filter connected to an output of said tuner portion and limiting said intermediate frequency signal to a frequency band for transmission;
  - a gain control unit connected to an output of said surface acoustic wave filter, including at least one dual gate type MOSFET and performing control based on an externally provided control voltage such that gain of said intermediate frequency signal is constant; ~~and~~
  - an intermediate frequency amplifying circuit unit connected to an output of said gain control unit and using a differential amplifying circuit to amplify said intermediate frequency signal to provide a balanced output; ~~surface acoustic wave filter;~~
  - a lowpass filter connected to an output of said intermediate frequency amplifying unit and limiting the output of said intermediate frequency amplifying unit by filtering out a signal out of a transmission band. ~~for outputting unbalanced signals connected to an output of said gain control and intermediate frequency amplifying circuit; and~~
  - ~~an output circuit connected to an output of said lowpass filter for outputting balanced signals.~~

2. (currently amended) The cable modem tuner according to claim 1, further comprising:
  - an output circuit connected to an output of the lowpass filter for outputting balanced signals,
  - wherein said output circuit includes an unbalance/balance converting circuit converting unbalanced signals of an output of said lowpass filter to balanced signals.

3. (original) The cable modem tuner according to claim 1, wherein  
said output circuit includes a differential amplifying circuit providing an output of  
said lowpass filter as balanced signals.

4. (canceled).

5. (canceled).

6. (canceled).